EXHIBIT DD

What Satoshi Said: Understanding Bitcoin Through the Lens of Its Enigmatic Creator

Update March 6: In a lengthy cover story at Newsweek, reporter Leah McGrath Goodwin claims to have identified Satoshi as Dorian S. Nakamoto, a model train enthusiast, former FAA contractor, and resident of California. We'll update that story as more details emerge.

For all of Bitcoin's fabled transparency—its open source development, how the block chain is totally public, and the fact that we know exactly how many coins will be minted ever—one mystery remains, perhaps forever. Who the hell is Satoshi Nakamoto?

By now, we've all heard some version of the nebulous theories: if he's a man or a woman; British or American; a single person or a group; a private enterprise or a government conspiracy. Fantasizing about that stuff is fun because it's stranger than fiction, but it gets us no closer to understanding who he is or what his vision was for his Frankenstein currency. But what we *can* do is analyze what he said, which was plenty. Admittedly, there's no way we can concretely prove any of these quotes actually came from Satoshi beyond the fact they use the same username, though few people consider the possibility of an imposter in these early days of Bitcoin's birth.

November 1, 2008 (The Cryptography Mailing List): "I've been working on a new electronic cash system that's fully peer-to-peer, with no trusted third party."

This was the introduction to Satoshi's now infamous white paper unleashing the concept of Bitcoin to the world. As always, he was matter-of-fact and unassuming, providing his baby free of any embellishment.

November 7, 2008 (The Cryptography Mailing List): "Yes, [we will not find a solution to political problems in cryptography,] but we can win a major battle in the arms race and gain a new territory of freedom for several years. Governments are good at cutting off the heads of a centrally controlled network like Napster, but pure P2P networks like Gnutella and Tor seem to be holding their own."

While Satoshi did his best to maintain an apolitical stance, his comments on finding a technological solution when the political system was found to be lacking belied his techno-libertarian sensibilities and hacker mindset. Yifu Guo—long time Bitcoin insider and creator of the first specially designed systems for mining—mirrored such sentiments when he told us in our interview with him last year that their original motto was "ask for forgiveness, not for permission." Bitcoin early adopters and technocentric social-transcendents alike refuse to be shackled by society's pesky rules.

"[Bitcoin is] very attractive to the libertarian viewpoint if we can explain it properly," Satoshi admitted. "I'm better with code than with words though."

Satoshi clearly zeroed in on the power of peer-to-peer technology and the ability to connect outside the constructs of historically calcified systems. The history of music piracy is technological Darwinism at its finest. Technological fitness evolved as each new iteration was eliminated by government antibiotics, each mutation proving ever more difficult to address.

Today, regulatory subscriptions are totally ineffective against the illegal exchange of copyrighted data. When the authorities are forced to raid the home of Kim Dotcom's mom, you know they've conceivably exhausted all other options. We live in the era of "superbugs" in terms of digital

innovation. The powers that be will never be able to completely stamp out torrenting just as cryptocurrencies will always exist.

January 3, 2009 *(The Genesis Block): "The Times 03/Jan/2009 Chancellor on brink of second bailout for banks."*

This was the famous comment left in the very first Bitcoin transaction, an actual news headline from the front page of the *Times* in London on that day, which sheds light on Satoshi's fundamental motivation: people feel let down by our global financial industry. Worse, when shit hits the fan, the government will always bail out too-big-to-fail banks at the expense of everyone else.

Embedded within this straightforward, factual news headline is a deep sense of systematic injustice. Keeping the ship afloat is an admirable cause, but doing so in a way that relinquished the architects of the greatest economic disaster in generations from financial, regulatory, or criminal consequences felt deeply unfair. Satoshi brought it upon himself to develop a form of technological solution and protest. What a cyberpunk.

Satoshi would later comment on his thought process, confirming again his notorious caution and inherent awareness of PR game theory. "I very much wanted to find some way to include a short message, but the problem is, the whole world would be able to see the message," he wrote a year later. "As much as you may keep reminding people that the message is completely non-private, it would be an accident waiting to happen."

It also hinted that Satoshi might be British. I've only heard of chancellors from Star Wars and my college roommate's World of Warcraft guild, but apparently across the pond, the Chancellor of the Exchequer is the equivalent of the Secretary of the Treasury here in the US.

February 11, 2009 *(P2P Foundation): "Instead of the supply changing to keep the value the same, the supply is predetermined and the value changes. As the number of users grows, the value per coin increases. It has the potential for a positive feedback loop; as users increase, the value goes up."*

Bitcoin has often been characterized for being deflationary, which arguably destabilizes its value, but this was by design. In particular, Satoshi looked to exploit our human weakness for FOMO.

Likewise, he didn't see the issue of lost coins as a big deal. "Lost coins only make everyone else's coins worth slightly more," he later wrote. "Think of it as a donation to everyone."

February 14, 2010 *(BitcoinTalk Forum) "I'm sure that in 20 years there will either be very large [Bitcoin] transaction volume or no volume."*

Satoshi had a knack for saying stuff that any rational person would have a tough time disagreeing with, like his predictions for Bitcoin's success. Indeed, one of Bitcoin's early vocal critics, Business Insider's Henry Blodget, articulated Satoshi's thinking in his teardown of the budding cryptocurrency for having "everything it needs to become a major speculative bubble."

"But the difference between Bitcoin and, say, the 1990s Internet bubble, is that there really is no fundamental way to value Bitcoin," argued Blodget, predicting that Bitcoin could reach $5,000 or could reach zero.

In fact, Blodget's suggestion toes Bitcoin's own ideological party line, one that I've heard repeated by other insiders, crypto-entrepreneurs and core developers including lead developer Gavin Andresen— who worked closely with Satoshi in the early days while he was still around. "Don't invest more in bitcoins than you are willing to lose," he told us when we spoke to him at the Bitcoin conference in San Jose last year. "The value of bitcoins could reach $10,000 or just as easily go back to zero."

Far from ambivalence, Satoshi's statement reflected a deep sense of conviction regarding his baby. If Bitcoin ever caught on, it would be huge, but his manner of communication was soaked in confident humility, preemptively sidestepping inevitable criticism of what could be conceived as an opportunistic fad. No one can predict the future, but by delivering the message in such a way, Satoshi imbued his belief in a potentially game changing bit of innovation while relinquishing believers from financial responsibility. For early adopters after all, it was never about the price.

February 26, 2010 (BitcoinTalk Forums): "How does everyone feel about the B symbol with the two lines through the outside? Can we live with that as our logo?"

A true renaissance man in every sense of the word, Satoshi even came up with Bitcoin's globally recognized logo, most likely without ever setting foot in Parsons School of Design.

June 18, 2010 (BitcoinTalk Forums): "[I've been working on Bitcoin] since 2007. At some point I became convinced there was a way to do this without any trust required at all and couldn't resist to keep thinking about it. Much more of the work was designing than coding. Fortunately, so far all the issues raised have been things I previously considered and planned for."

Most great technologists throughout history and especially in the modern era, the Elon Musks and Steve Jobs, are more producers than pure engineers—jacks of all trades with an eye for tomorrow and the wherewithal to put the right pieces together to form an effective end product. Technological advancement is incremental and it's often the case that true innovation comes from putting together the puzzle pieces, equal parts science and cultural curation. Any groundbreaking inventor stands on the shoulder of giants.

Satoshi is no different. Rather than make narrow breakthroughs in any particular field, he found himself at the intersection of rapidly maturing tech that allowed him to address age-old paradoxes. In the case of Bitcoin, Satoshi's elegant marriage of cryptography, decentralized peer-to-peer technology, and financial social networking solved the so-called Two Generals' Problem.

Without getting into the intricacies of the decades-old thought experiment, Bitcoin's true innovation is that it finally allows consensus without the need for a central authority. Until Bitcoin, any transaction had to be confirmed by a credible entity, in most cases a bank or service like Western Union or Paypal. They confirm that anyone trying to spend money has the necessary funds to their name. By cleverly eliminating this requirement while maintaining trust, Satoshi created a form of currency that could forever live in the elusive gray areas of society and more importantly, the digital world. This simultaneously allows for Bitcoin to behave like cash on the internet while providing the cryptocurrency a fundamental resilience against centralized powers.

"The result is a distributed system with no single point of failure," Satoshi explained. "Users hold the crypto keys to their own money and transact directly with each other, with the help of the P2P network to check for double-spending."

July 5, 2010 (BitcoinTalk Forums): "We don't want to lead with 'anonymous.' I am definitely not making any such taunt or assertion [that] 'The developers expect that this will result in a stable-with-respect-to-energy currency outside the reach of any government.'"

Satoshi wasn't as punkish or anti-establishment as people might think given the initial narrative of Bitcoin as a vehicle for money-laundering, drug purchases, or in the case of purist libertarians, a means to finally end government power. This was either never his aim or he was thoughtful enough to realize it wasn't a smart ideological approach.

The evolution of the movement appears to confirm this as governments begin to devise relevant regulations and Bitcoin becomes assimilated into the system. Rather than replace what we know,

cryptocurrencies complement what we've already built and understand. Satoshi was a lot less inflammatory than he gets credit for.

July 5, 2010 (BitcoinTalk Forums): "Sorry to be a wet blanket. Writing a description [of Bitcoin] for general audiences is bloody hard. There's nothing to relate it to."

Wrapping your head around Bitcoin can be exhausting, partly because it's like nothing else in existence —a notion Satoshi was keenly aware of.

July 29, 2010 (BitcoinTalk Forums): "If you don't believe me or don't get it, I don't have time to try to convince you, sorry."

Smug bastard.

August 7, 2010 (BitcoinTalk Forums): "The utility of the exchanges made possible by Bitcoin will far exceed the cost of electricity used. Therefore, not having Bitcoin would be the net waste."

Bitcoin mining has been a source of criticism for its environmental impact. Solving arbitrary proofs could be perceived as a waste of energy, but Satoshi attempted to rationalize this by emphasizing the potential benefits of the technology. Without energy-sucking mining, Bitcoin's self-regulating, decentralized model wouldn't be possible. As Satoshi probably figured, it's not like anyone has come up with a better idea, not yet.

August 27, 2010 (BitcoinTalk Forums)"Bitcoins have no dividend or potential future dividend, therefore not like a stock. [They're] more like a collectible or commodity."

Economic experts like to point out that Bitcoin doesn't resemble a currency at all but acts more like gold. Satoshi agreed that it had the characteristics of a commodity. By comparing it to a collectible, was he entertaining the idea that it might resemble a fad like tulips, Furbies, or pogs?

September 23, 2010 (BitcoinTalk Forums): "Bitcoin would be convenient for people who don't have a credit card or don't want to use the cards they have, either don't want the spouse to see it on the bill or don't trust giving their number to "porn guys", or afraid of recurring billing."

For Satoshi, the subversive tendencies of anonymity were more about philosophical privacy rather than illicit activities.

December 12, 2010 (BitcoinTalk Forums): "There's more work to do on DoS, but I'm doing a quick build of what I have so far in case it's needed, before venturing into more complex ideas."

This was Satoshi's final message. He had previously conceded that the "software is not at all resistant to DoS attack," but had promised to work on the issue. It's possible that he never figured out a concrete solution and, overviewing the project's progress, decided that his work was already done. One can only guess what "complex ideas" he was venturing into.

Over at Crypt.la, Fred Marion has a roundup of more key quotes and they're worth checking out. You can also find more of Satoshi's posts over at the Bitcointalk forums as well as the P2P Foundation.

@sfnuop